Show all work on a separate sheet of paper as this review does provide the space needed to show work.

1. Complete the statement.
The sum of the measures of the \( n \) interior angles of an \( n \)-gon is ________________.

2. Find the sum of the measures of the angles of a dodecagon.

3. What is the measure of each angle in a regular nonagon?

4. Find the measure of an interior angle and an exterior angle of a regular polygon with 30 sides.

5. How many sides does a regular polygon have if the measure of each exterior angle is equal to \( 8^\circ \)?

Find the lettered measures in each figure.

6. The figure is a kite.
\[ x = \quad y = \quad z = \quad m = \quad \]

7. The figure is a kite.
\[ x = \quad y = \quad k = \quad \]

8. Find the missing angle measures in the isosceles trapezoid.

9. Isosceles trapezoid \( ABCD \) has legs \( AB \) and \( CD \), and base \( BC \).
If \( AB = (3y + 6) \) inches, \( BC = (9y - 3) \) inches, and \( CD = (7y - 9) \) inches, find the value of \( y \).

10. Find the lettered measures in each figure.
\[ x = \quad y = \quad z = \quad \]

11. Trapezoid \( ABCD \) contains midsegment \( \overline{EF} \). If \( AB = 9 \) inches and \( EF = 12 \) inches, find the length of \( \overline{DC} \).
12. Find the equation of the line that contains the midsegment $TV$ of trapezoid $PQRS$ shown below.

13. Find the value of the variables in the parallelogram.

14. Find the value of $x$ and $y$ given figure $ABCD$ is a parallelogram. All measures are in cm.

15. In the parallelogram below, $QN = 16$ inches, $NO = 21$ inches, and $PO = 28$ inches. Find the perimeter of $\Delta NMP$.

16. The figure below is a rhombus.

What is the total length of the perimeter and both diagonals of the rhombus?

17. Complete the statement. Do not use square as an answer.
The diagonals of a ________________ bisect the opposite angles.

18. $MJKL$ is a rhombus. If $m\angle MJK = 124^\circ$, what is the measure of $\angle JKM$?
19. This is a rectangle. If $OP = 9$ inches, what is the length of $LN$?

20. Name all the line segments that are congruent to $BO$ in the square $BADC$.

21. In square $KLMN$, $LN = 28$ inches. What is the area of $\triangle LOM$?

22. Find the coordinates of the point that lies three fourths of the way from:
   a. $(-6, -2)$ to $(-12, 8)$
   b. $(-7, 13)$ to $(14.5, -5)$

23. Solve the equation and check your solution.
   a. $-\frac{17}{40} = -\frac{3}{8} - \frac{t}{5}$
   b. $\frac{14}{y} + 4 = -\frac{42}{3y}$
   c. $\frac{6}{x} \frac{-1}{2} = \frac{5}{2x} + \frac{11}{6}$

24. Find each lettered angle measure.

25. Use the segment and angle shown to construct rhombus $WAVY$ using $\angle W$ and segment $z$ as the diagonal $WV$. Use a compass and a straightedge and/or patty paper.
26. Copy and complete the flowchart proof of the conjecture: The opposite angles of a parallelogram are congruent.

**Given:** Parallelogram $PDQR$ with diagonal $PQ$

**Show:** $\angle PDQ \cong \angle QRP$